

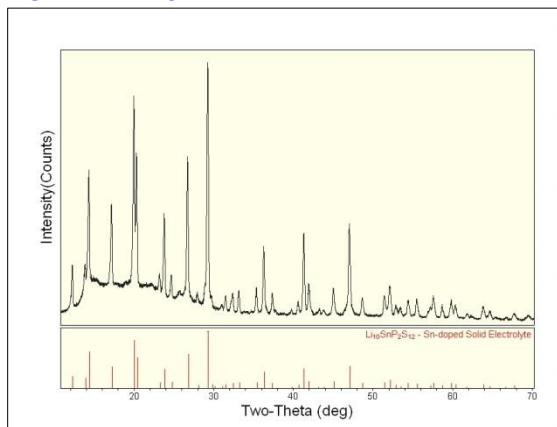
## PHYSICAL CHARACTERISTICS

<b>Chemical Name:</b>	Lithium Tin Phosphorous Sulfide
<b>Chemical Formula:</b>	$\text{Li}_{10}\text{SnP}_2\text{S}_{12}$ (LSPS)
<b>Color:</b>	Grey
<b>Purity:</b>	> 95%
<b>Average Particle Size (APS):</b>	7 – 8 $\mu\text{m}$
<b>Grain Size:</b>	250 – 300 nm
<b>Crystal Structure:</b>	Tetragonal
<b>Crystal Density:</b>	2.254 $\text{g}/\text{cm}^3$
<b>Specific Surface Area:</b>	1.45 $\text{m}^2/\text{g}$
<b>Stable Temperature Range:</b>	Up to 500°C
<b>Ionic Conductivity:</b>	$10^{-4}$ to $10^{-2}$ S/cm (@ RT)

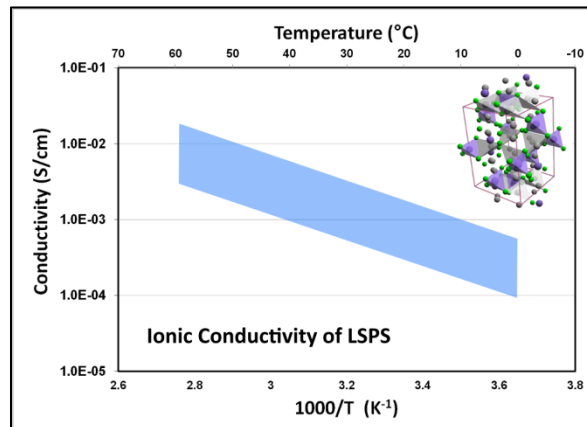
## OPERATING CONDITIONS

<b>Stability Voltage Window:</b>	~ 5.0V vs. Li/Li+
<b>Sensitivity to Air or Moisture:</b>	Highly Sensitive
<b>Recommended Working Atmosphere:</b>	Inert Atmosphere (Ar/He)

## CHARACTERIZATION DATA



XRD



Ionic Conductivity

## STORAGE & HANDLING

### Precautions for Safe Handling

Handle in a controlled environment, under inert gas. Never allow product to come in contact with moisture or water. Appropriate personal protective equipment should be used at all times. Avoid contact with eyes and skin. Provide good ventilation or extraction, and avoid breathing vapors.

### Conditions for Safe Storage

Store under inert gas in a cool, dry, and well-ventilated place. Keep container tightly sealed and protect from moisture. Never allow product to get in contact with water during storage.

**Refer to SDS for complete information on the safe handling of this material.**

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